

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY  
CAMDEN VICINAGE**

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**IN RE PAULSBORO  
DERAILMENT CASES**

**MASTER DOCKET NO.:  
1:13-CV-784 (RBK/KMW)**

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**ALICE BREEMAN, *et al.***

**Plaintiffs,**

**v.**

**CONSOLIDATED RAIL  
CORPORATION, *et al.*,**

**Defendants.**

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**Plaintiffs' Brief in Support of their  
Motion to Exclude the Expert Report and  
Testimony of Defendants' Expert Greg Yarwood, Ph.D.**

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## RULES

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16, 18

## **I. Introduction**

Defendants seek to offer Greg Yarwood, Ph.D., as an expert witness to attack the opinion of Plaintiffs' expert, Professor Panos Georgopoulos. Although Rule 702 is flexible with respect to the admission of expert testimony, it is not boundless. It simply cannot be stretched so far as to make Yarwood's opinion admissible.

Yarwood's opinion is unreliable and lacks any good grounds to support it -- violating the cardinal touchstones of Rule 702 and Supreme Court case law interpreting the rule. Yarwood is completely unfamiliar with standard authoritative texts in his field, and his opinion has no valid scientific basis. He does not even *purport* to adhere to any methodology or practices that are followed in his field. Instead, he uses a method that he concedes has never been used before, grasping for at least *some* means, however unscientific and unreliable, for attacking Dr. Georgopoulos's opinion. Yarwood's methodology is completely novel and untested, and has no acceptance or recognition among experts in his field.

Because Yarwood's opinion is raw speculation -- totally untethered from actual science as practiced in his profession -- it cannot possibly satisfy Rule 702's fundamental requirement that to be admissible, an expert opinion must be helpful to the trier of fact. Accordingly, Yarwood should be precluded

from testifying and his report should be excluded from evidence.

## **II. Facts**

The Railroad Defendants have offered the opinion of Dr. Yarwood to attack the opinion of Plaintiff's expert, Dr. Georgopoulos -- that 23,000 gallons of vinyl chloride would have had a half-life of 18 hours, with the principal decay products being hydrochloric acid (HCL) and formaldehyde. Dr. Georgopoulos based his model on standard, accepted textbook assumptions about the half-life and the decay products of vinyl chloride which appear in the ATSDR's "Toxicological Profile" of Vinyl Chloride, and which assume that decay would be driven by a concentration of hydroxyl radicals (OH) in the air measuring  $1.5 \times 10^6$ . Exhibit A, P.G. Georgopoulos Declaration in Opposition to Motion to Exclude Expert Report and Testimony, ¶ 16, filed June 19, 2015 (hereafter "Georgopoulos decl."). The baseline OH used by Georgopoulos,  $1.5 \times 10^6$ , is exactly the same as that used by the ATSDR in its toxicological Profile of Vinyl Chloride (U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry. Toxicological Profile for Vinyl Chloride, July 2006). Exhibit A, Georgopoulos decl. ¶ 16.

The methodology Yarwood uses to attack Dr. Georgopoulos's opinion is based is a novel methodology that Yarwood designed especially for this

litigation -- one which he had never used before and which has never been described in the peer-reviewed literature. Yarwood calculated the rate of degradation of vinyl chloride to its decay products by injecting a measure of UV-A sunlight for each daylight hour on the day of the incident, and then took the percent of the daily average represented by that hour and multiplied it by a hypothetical concentration of hydroxyl (OH) radical of  $1 \times 10^6$  per cubic centimeter, or  $1 \times 1,000,000$ . Using this methodology, he calculated, for instance, the degradation rate at 7:00 a.m. as 2.11% of the daily average because that is the UV-A solar radiation rate at that time. This enabled him to opine that the actual atmospheric decomposition of vinyl chloride during the three hours between 7:00 a.m. and 10:00 a.m. would have been only about 5%. See Exhibit B, Yarwood Report at p.6. At this rate, the half-life of vinyl chloride would be far greater than 18 hours—and the rate of decay far less.

### **III. Argument**

In considering pre-trial challenges to expert testimony, Rule 702 has “three major requirements: (1) the proffered witness must be an expert, *i.e.*, must be qualified; (2) the expert must testify about matters requiring scientific, technical or specialized knowledge; and (3) the expert’s testimony must assist the trier of fact.” *Pineda v. Ford Motor Co.*, 520 F.3d 237, 244

(3d Cir. 2008). The rule itself provides that “[a] witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise *if*:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) *the testimony is the product of reliable principles and methods*; and

(d) *the expert has reliably applied the principles and methods to the facts of the case.*

In *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579 (1993), the Supreme Court noted four non-exhaustive factors the district court may use in determining the reliability of scientific expert testimony: (1) whether a theory has been tested; (2) whether it has been subject to peer review; (3) whether a technique has a potential rate of error, or standard operating procedures; and (4) whether a theory is generally accepted within the scientific community. *Id.* at 592-94. The focus must be solely on the methodology and principles used, not on the conclusions that they generate, *id.* at 595. *Daubert* emphasized: “[I]n order to qualify as ‘scientific knowledge,’ an inference or assertion must be derived by the scientific method. Proposed testimony must be supported by appropriate validation—i. e., ‘good grounds,’ based on what is known. In short, the requirement that an expert's testimony pertain to ‘scientific



knowledge" establishes a standard of evidentiary reliability. *Id.* at 590. When this focus is applied it becomes clear that Yarwood's opinion does not rest on good grounds. It is unreliable and can be of no help to the trier of fact here.

There are two glaring problems with Yarwood's method that render it unreliable. First, the baseline he chose for the concentration of OH in the atmosphere ( $1 \times 10^6$  per cubic centimeter or  $1 \times 1,000,000$  OH radicals) is an obsolete number based on a 1999 text book. Subsequent studies have established that the concentrations during daylight hours in urban environments similar to Paulsboro are in fact far higher, ranging as high as  $2.7 \times 10^6$ . See Exhibit A, Georgopoulos decl. ¶¶ 15-17.

Second, even more fundamentally, Yarwood's methodology of using UV-A concentrations to estimate the OH concentration in the atmosphere (even assuming that  $1 \times 10^6$  is the correct baseline) is completely untried and unproven:

Q: Can you point to any reference in the peer reviewed literature that uses this methodology of calculating the OH concentration in daytime?

A: I have not seen this method used before.

Q: Have you used this method before?

A: No.

Exhibit C, Yarwood Dep. at 50:3-8.

Yarwood's opinion that once vinyl chloride decomposed to formyl chloride, *it would remain formyl chloride* for hours rather than decompose to hydrochloric acid, is baseless. Indeed, it defies the scientific consensus on the unstable nature of formyl chloride documented in standard and highly respected textbooks as well as in a wide range of research articles. Exhibit A, Georgopoulos decl. ¶ 12 (specifying texts and articles).

Yarwood agrees with the data underlying Dr. Georgopoulos's opinion -- that the ATSDR identifies hydrochloric acid as a decomposition product of vinyl chloride and that the ATSDR also states that vinyl chloride has a half-life of 18 hours based on an OH concentration of  $1.5 \times 10^6$  molecules per cubic centimeter. Exhibit C, Yarwood Dep. at 59:3-60:9; 60:11-61:8 (citing from ATSDR toxicological profile for vinyl chloride pgs. 169-171). Further, Yarwood conceded that two studies from the 1970s, one by Hisatsune and Heicklen (1973) and the other by Gay (1976), supported the conclusion that vinyl chloride would decay to hydrochloric acid because formyl chloride, the intermediate compound, is unstable. Exhibit B, Yarwood report at 7 (Opinion 3). Yarwood could only support his opinion that the decaying vinyl chloride in Paulsboro on the day of the incident remained stable as formyl chloride and did not decay to hydrochloric acid, by speculating that the rapid

decomposition of formyl chloride to carbon monoxide and hydrochloric acid (about ten minutes), reported by Hisatsune and Heicklen, is attributable to a chemical reaction occurring on the glass surface of their container and is not relevant to conditions in the atmosphere. Exhibit C, Yarwood dep. at 89:15-22. Despite his attributing the rapid decay to a chemical reaction on a glass surface, though, Yarwood has no idea *how or why* any such alleged reaction could take place. Exhibit C, Yarwood dep. at 90:12-14. Thus, Yarwood's opinion about the rapid decay boils down to a bald, unsupported opinion that the glass surface ***must have been*** the reason for the rapid decay. This amounts to pure speculation.

Significantly, Yarwood attributes that rapid decay to the small size of the container that Hisatsune and Heicklen used for their experiment: “[a] 100 ml glass container is small (about half a cup) such that formyl chloride would quickly come into contact with the glass surface of the container where it could decompose to carbon monoxide and hydrochloric acid on the glass surface.” Exhibit B, Yarwood report at 7 (Opinion 3). But Yarwood conducted an experiment in a glass container ***two thousand times larger*** than Hisatsune and Heicklen's container and still the decay to HCL took place rapidly. See Exhibit C, Yarwood dep. at 89:15-90:11.

For reasons that are a mystery, Yarwood apparently contends that vinyl

chloride's unstable, intermediate decay product of formyl chloride could not have decayed to HCL rapidly on the day of the derailment because Paulsboro is not in a glass container. That is the logical inference from his opinion. But Yarwood's "glass-container theory" is merely a wild guess. He is unable to explain the mechanism by which such theory purportedly works:

Q. Now, when you do that experiment, you used a 200-liter container; did I hear that right?

A. That's my best recollection of the experiments that I was involved in.

Q. And they used 100 milliliter, I interpret that to be a 10th of a liter container?

A. Correct.

Q. So yours was about 2,000 times larger than theirs, correct?

A. Correct.

Q. And your experiment still decayed in tens of minutes?

A. Yes.

Q. Okay. *What is it about the glass surface that causes it to decay?*

A. *I don't know.*

Q. Okay. Would you expect it to decay on other surfaces besides glass?

A. It could decay on other surfaces besides glass.

\* \* \*

Q. Okay. The statement that the decay in 10 minutes is attributable to the chemical reaction [that] occurs on the glass surface, who made that attribution? Who attributed it to the chemical reaction on the glass surface?

A. *I attribute it.*

Q. Neither Hisatsune and Heicklen nor Tuazon and his group attributed to that, correct?

A. My recollection of the papers agrees with your statement.

Q. Okay. Is there anything published in the peer review literature which attributes the tens of -- ten minute or tens of minutes decay of formyl chloride to HCL to glass surfaces?

A. I have not seen that discussed in the literature.

Exhibit C, Yarwood dep. at 89:23-90:17; 91:4-19 (emphasis added). The fact that “Yarwood has spoken” hardly provides scientific support for his novel, untested methodology or his speculative opinion based thereon. *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) (“[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion offered.”).

Based on Yarwood's unscientific, false premises -- that vinyl chloride's intermediate decay product (formyl chloride) is stable and that vinyl chloride decays rapidly to HCL only when it's in a glass container, his opinion follows a "logical" syllogism: 1. Vinyl Chloride decays to HCL rapidly only in glass containers. 2. The vinyl chloride in Paulsboro on the day of the derailment was not contained in a glass container. 3. Therefore, the vinyl chloride in Paulsboro did not decay rapidly. 4. Instead (contrary to all scientific knowledge and proof), formyl chloride is stable and remained in the atmosphere at Paulsboro without decaying to HCL. Yarwood's opinion that formyl chloride only decays rapidly when exposed to glass surfaces, as opposed to other surfaces is at best speculation, unsupported by any scientific literature or analysis.

Purporting to rely upon a 1988 study by Tuazon, Yarwood contends that the decay of formyl chloride to HCL would only occur on the *glass surfaces* and thus "is not relevant to conditions in the atmosphere." Exhibit C, Yarwood dep. at 89:15-22. Yet this conclusion does not appear anywhere in the Tuazon article or anywhere else in the peer-reviewed literature (Exhibit C, Yarwood Dep. at 91:4-19), thus further demonstrating a lack of any scientific support for Yarwood's opinion. *See Loughren v. UnumProvident Corp.*, 604 F. Supp. 2d 259, 266 (D. Mass. 2009) ("W.G. Cochran's Sampling

Techniques (3rd ed.), which [proposed expert] Mercurio describes as an "authoritative text," makes no mention of [Mercurio's methodology of] cohort sampling."); *King v. Secretary of Health and Human Services*, 2010 U.S. Claims LEXIS 87, \*29 (U.S. Ct. Claims March 12, 2010) ("[A]n analysis of the Pardo/Vargas articles themselves demonstrates the point that those articles are not a sound basis for Dr. Kinsbourne's conclusion that the observed neuroinflammation is a cause of autism. Nowhere in those articles do the authors state the conclusion that the neuroinflammation is a cause of autism.").<sup>1</sup>

Dr. Yarwood appears to be the only atmospheric chemist in the world who believes formyl chloride would remain stable in the atmosphere. No expert who has looked at the scientific literature has ever concluded that vinyl chloride only decays from formyl chloride to HCL when it comes in contact with glass. That, however, does not present a problem to Yarwood, for he cements his status as a "denier" of rapid vinyl chloride-to-HCL

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<sup>1</sup> Indeed, the surface of Tauzon's container was *Teflon*, not glass, and formyl chloride's slowness to degrade to HCL in Tuazon's study could just as easily explained by the fact that the surface of that container was *Teflon*. Exhibit C, Yarwood Dep. at 96:1-6. Significantly, Tauzon himself did not attribute any significance to the nature of a container's surface. This was pure, unprecedented speculation on Yarwood's part. See *Bowman v. Secretary of Health and Human Services, Respondent*, 2008 U.S. Claims LEXIS 599, \*48 (U.S. Ct. Claims August 29, 2008) (article did not support expert's opinions based thereon where article's authors had not reached conclusions drawn by expert).

decomposition by refusing to acknowledge the authoritativeness of the authors of several books on organic chemistry, all of which state without hesitation, that formyl chloride is unstable (and hence can only decay to HCL). Exhibit C, Yarwood Dep. at 100:9-101:14.

Yarwood's methodology is unique *to him*; it is not employed by experts in his field. Notably, the reason Yarwood's opinion lacks reliability is not because he has misapplied a standard or an accepted methodology. He hasn't. It's because he has subjectively devised his own different, novel methodology, one that is peculiar to him and is completely untested by the scientific method, and he has done so for no legitimate reason and with no peer-review validation. His method does, however, enable him to arrive at his desired result.<sup>2</sup>

Yarwood also admits using as his key assumption an outdated number from an old text. Exhibit C, Yarwood dep. at 77:3-6. That number ( $1.0 \times 10^6$ ) is obsolete with respect to actual air levels of OH, and has been superseded by information in new studies and data and has been supplanted by a more recent number accepted by the profession ( $1.5 \times 10^6$ ). Exhibit A,

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<sup>2</sup> To venture a basketball analogy, it would be as though Yarwood arranged to be the official score keeper for an away game, and elected to multiply the opposing team's points by .75, claiming it was justified because his own players weren't accustomed to the particular surface of the opponent's court. Such a valuation does not follow any accepted methodology for calculating a basketball score, and is based on a factor unrelated to scoring.



Georgopoulos declaration ¶ 16. Yarwood admits there have been a series of studies publishing actual OH measurements in various environments over the last five years. Exhibit C, Yarwood dep. at 76:18-22. Yet he did not review any of those in connection with the report he prepared in this case. Exhibit C, Yarwood dep. at 76:23-77:2.

Moreover, Yarwood is completely *unfamiliar with* numerous standard, highly-regarded texts in his field. *See* Exhibit A, Georgopoulos decl. ¶¶ 12-13; Exhibit C, Yarwood dep. at 100:9-101:14. To reach his opinion, Yarwood had to ignore the standard methodology employed in his field and reach into his “basket of tricks” for a magic number that would enable him to arrive at the result he needed. *See In re TMI*, 193 F.3d 613, 703-704 (3d Cir. 1999). Such “expert sorcery” should not be permitted in the courtroom.

A district court's task in assessing expert evidence is to determine whether the evidence “both rests on a reliable foundation and is relevant to the task at hand.” *Ky. Speedway, LLC v. Nat’l Ass’n of Stock Car Auto Racing, Inc.*, 588 F.3d 908, 915 (6th Cir.2009) (quoting *Daubert*, 509 U.S. at 597). Generally, “[t]he district court must consider ‘whether the reasoning or methodology underlying the testimony is scientifically valid.’” *Id.* (quoting *Daubert*, 509 U.S. at 592-93). In this case, Yarwood’s opinion is not based on a reliable foundation, but on his personal, never-before-used methodology, and thus is

anything but “the product of reliable principles and methods” or the reliable application of legitimate principles and methods to the facts of the case. *See* Fed.R.Evid. 702.

In order to avoid allowing subjective speculation to masquerade as expert opinion, Rule 702 requires that before an opinion based on a novel method be admitted, the method must be shown to be reliable. *Daubert* requires “that the proponent of the evidence show that the expert's conclusion has been arrived at in a scientifically sound and methodologically reliable fashion.” *Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co.*, 161 F.3d 77, 85 (1st Cir. 1998). The means of establishing reliability are adequate testing and peer review, and Yarwood’s method fails on both counts.

In *In re TMI*, the district court and the Third Circuit “called out” an expert for employing a “methodology” similar to Yarwood’s:

From [Molholt’s testimony], we can only conclude that the methodology Molholt used to score and weigh his parameters to determine causation is purely subjective. In order for expert testimony to meet Daubert's reliability standard, it must be based on the methods and procedures of science, not on subjective belief and unsupported speculation. Molholt's subjective methodology is suspect. As quoted above, he testified that when he was at the boundary between certainty and uncertainty, i.e., when according to his own scoring system a trial plaintiff's score reached nine, he "would reach into [his] basket of tricks" to pull out something which he thought deserved more weight. Not

unexpectedly, he always found something in his magical basket which caused the score to exceed nine and pass from uncertainty to certainty. However, we are as unimpressed with his [Felix the Cat] "Felixian" basket of tricks as the District Court was, and we conclude that the exclusion of Molholt's March 13, 1995 report was not an abuse of discretion.

*Id.* (citations and footnotes omitted).<sup>3</sup>

A trial court needs to ensure that an expert “employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Neal-Lomax*, 574 F. Supp. 2d at 1202, quoting *Kumho Tire*, 526 U.S. at 152. Significantly, Yarwood makes no pretense that his personal methodology has scientific support or is a methodology accepted in his profession. He readily concedes that until providing his opinion for this lawsuit he had never seen his method used before by anyone, *and had never*

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<sup>3</sup> The Court noted:

Because Molholt's parameter scoring methodology is entirely subjective it is obvious that it does not satisfy a number of the Daubert factors. It was never peer reviewed, there is no known or potential rate of error, there are no discernable standards governing its operation, and it is not generally accepted. *Daubert*, at 593-594. Further, and significantly, it is impossible to test a hypothesis generated by a subjective methodology because the only person capable of testing or falsifying the hypothesis is the creator of the methodology.

*Id.* at 703 n.145.

*used it himself*. Exhibit C, Yarwood Dep. at 50:3-8. Thus, Yarwood had never used his novel methodology in the normal practice of his profession.

One "very significant fact" in determining whether an expert is applying the intellectual rigor of his professional practice is whether the expert developed his opinion expressly for purposes of testifying, since a scientist's normal workplace is the lab or the field, not the courtroom or the lawyer's office. *Lust v. Merrell Dow Pharms., Inc.*, 89 F.3d 594, 597 (9th Cir. 1996). Although an expert's failure to subject his method to peer-review and to develop an opinion outside the litigation does not *necessarily* render his opinion inadmissible, if these guarantees of reliability are absent he must explain his methodology precisely and must "point to some objective source" supporting his methodology. *Id.*

Within the framework of Rule 702, the basis of Yarwood's expertise is *scientific* knowledge, not "technical or other specialized knowledge." Accordingly, to be reliable under Rule 702, Yarwood's methodology must have been subjected to scientific testing and been shown to be valid. Where, as is the case with Yarwood, the expert can point to neither experience nor scientific literature to support his methodology, reliability is lacking and this court may conclude that "what's going on here is not science at all, but litigation." *Schepise v. Saturn Corp.*, 1997 U.S. Dist. LEXIS 21323, \*51

(D.N.J. July 30, 1997); *Rutigliano v. Valley Business Forms*, 929 F. Supp. 779, 786 (D.N.J. 1996), *aff'd*, w/o op., Civil Action No. 96-5478 (3d Cir. June 27, 1997).

Here, Yarwood has provided no rational explanation for his selection of invalid assumptions and has done nothing to identify any source of objective information supporting his methodology. He simply ignores any “inconvenient” science that undercuts his opinion. Accordingly, Yarwood should be precluded from testifying, and his report should be excluded from evidence. *See Palmer v. Lampson International, LLC*, 2012 U.S. Dist. LEXIS 190282, \*9-10 (D. Wyo. Nov. 28, 2012) (finding that *Daubert's* third and fourth factors cut against admissibility based on Plaintiffs’ arguments that challenged expert presented no evidence as to the known or potential rate of error associated with his methodology and whether there are controlling standards; where no authorities were identified to suggest that his chosen ratio was appropriate when measured against controlling engineering standards, nor any evidence suggesting that his ratio was generally accepted in the engineering community; and where proposed expert could point to no authoritative text, let alone another individual, to support the use of his ratio.).<sup>4</sup>

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<sup>4</sup> *See also Niemeyer v. Ford Motor Co.*, 2012 U.S. Dist. LEXIS 111859. \*12

Plaintiffs further note that Yarwood's opinion is a merely a "net opinion," i.e., one that is inadmissible because it is based on an expert's bare conclusions or is not supported by factual evidence. *Townsend v. Pierre*, 221 N.J. 36, 53, 110 A.3d 52 (2015). The courts of this district recognize that New Jersey's net opinion rule is a restatement of the well-settled "fit" requirement of Fed.R.Evid. 702, which renders an expert's bare conclusions inadmissible. *151 East Leaming Avenue Condo Ass'n, Plaintiff, v. QBE Specialty Insurance Co.*, 2015 U.S. Dist. LEXIS 79002, at \*8 n.1 (D.N.J. June 18, 2015); *Interlante v. Target Corp.*, 2014 U.S. Dist. LEXIS 87486, \*8-9 (D.N.J. June 26, 2014). Yarwood's opinion is excludable on this ground as well.

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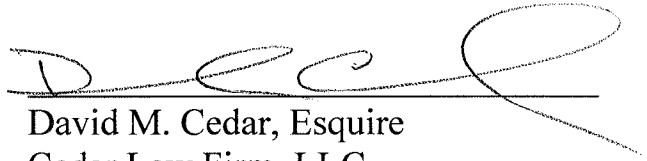
(D. Nev. Aug. 9, 2012) (excluding testimony of plaintiffs' expert that a direct impact of 11-12 mph would trigger airbag deployment, because "Plaintiffs have pointed to no peer-reviewed study, experiment, authoritative text or other objective source supporting the 11-12mph range, and thus the court finds it unreliable."); *Loughren v. UnumProvident Corp.*, 604 F. Supp. 2d 259, 266, 268 (D. Mass. 2009) ("Mercurio failed to cite any peer-reviewed literature to support his novel approach to overlapping cohorts" and he "merely asserts that Hayne's criticism [of his methodology] is "incorrect" with-out explaining how it is possible that his method could result in such a patently wrong answer."); *Neal-Lomax v. Las Vegas Metropolitan Police Dept.*, 574 F. Supp. 2d 1193, 1204-1205 (D. Nev. 2008) ("Woodard has not identified any peer reviewed study, experiment, authoritative text, or other objective source suggesting the Taser in drive stun mode results in forced muscular contractions that would interfere with compensatory hyperventilation. ... Absent any medical or scientific basis to support his opinion that the Taser can cause forced muscular contractions and impair compensatory hyperventilation, or that Taser discharges worsen metabolic derangement, Woodard's opinions are not based on reliable medical or scientific methodology.").

#### **IV. Conclusion**

For the foregoing reasons, Dr. Yarwood should be precluded from testifying to his opinion and his report should be excluded from evidence.

DATED: July 2, 2015

Respectfully submitted:

A handwritten signature in black ink, appearing to read 'D. Cedar', is written over a horizontal line.

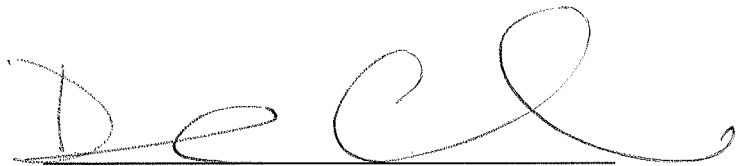
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**CERTIFICATE OF SERVICE**

I certify that on today's date a true and correct copy of Plaintiffs' brief in Support of their motion to exclude the opinion and report of Greg Yarwood, Ph.D was electronically filed with the Court's CM/ECF system, which will accomplish service of same on all counsel of record.

Dated: July 2, 2015

By:

A handwritten signature in black ink, appearing to read 'D. Cedar', written over a horizontal line.

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